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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,155	07/05/2006	John Tashereau	68916-2	2744
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
Office Action Summary		10/539,155	TASHEREAU, JOHN		
		Examiner	Art Unit		
		Eunice Ng	2626		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet w	vith the correspondence address		
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depend for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may a vill apply and will expire SIX (6) MO , cause the application to become A	ICATION. The reply be timely filed expression to the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).		
Status		•			
1)⊠	Responsive to communication(s) filed on <u>02 O</u>	<u>ctober 2007</u> .			
/—	This action is <b>FINAL</b> . 2b) This action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
		x parte Quayle, 1955 C.	D. 11, 403 O.G. 213.		
Disposit	ion of Claims				
	Claim(s) <u>1-9</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.	vn from consideration.			
6)⊠	Claim(s) <u>1-9</u> is/are rejected.				
·	Claim(s) is/are objected to.				
8)[_]	Claim(s) are subject to restriction and/o	r election requirement.			
Applicat	ion Papers				
•	The specification is objected to by the Examine The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct	epted or b)  objected to drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).		
11)	The oath or declaration is objected to by the Ex				
Priority (	under 35 U.S.C. § 119				
12) <u>□</u> a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document:  2. Certified copies of the priority document:  3. Copies of the certified copies of the priority application from the International Bureausee the attached detailed Office action for a list	s have been received. s have been received in a rity documents have bee u (PCT Rule 17.2(a)).	Application No n received in this National Stage		
Attachmer	at(s)				
2) Notice 3) Infor	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	Paper No	Summary (PTO-413) o(s)/Mail Date Informal Patent Application		

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#### **DETAILED ACTION**

### Response to Amendment

1. In response to the Office Action mailed 4/3/07, Applicants have submitted an Amendment, filed 10/2/07, amending claims 1, 6, 7, 8 and 9, without adding new matter, and arguing to traverse claim rejections.

## Response to Arguments

2. Applicant's arguments with respect to claims 1, 6, 7, 8 and 9 have been considered but are most in view of the new ground(s) of rejection, below.

#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 4. <u>Claims 1-6</u> are rejected under 35 U.S.C. 102(a) as being anticipated by <u>Pershan et al.</u> ("Pershan"), US Patent 6,650,738.

Regarding claims 1 and 6, Pershan teaches a method of matching an utterance comprising a word to a record in a database using an automatic speech recognition system (col. 3, line 60 – col. 4, line 22 teaches "voice dialing...speaking either the name or a nickname...voice dialing record is maintained for each subscriber. Information relating to each party or individual who may be called...providing and updating the information...calling entry...nickname...telephone

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number"; col. 4, ll. 49-67, teaches "speech recognition model for each name and nickname...speech recognition models for names...generated from the text of the name"; and col. 5, ll. 1-46 teaches "subscriber to provide one or more speech samples of a name...optionally speaker dependent...generated speech recognition model") comprising:

forming a word list comprising a selection of words from said records in said database (col. 19, line 27 – col. 20, line 22, teaches "voice dialing information included in the subscriber's voice dialing record which the user may wish to modify, add to, or delete...primary name and nickname...one or more telephone numbers"; col. 21, ll. 1-17, teaches "third column lists the nickname"; col. 5, ll.23-35 teaches "text version of the spoken name is generated and used to populate the...name portion of the calling entry information"; see Figs. 13-14, Fig. 13 illustrates a name/nickname list which contains words from the entire set of words in the directory);

using the automated speech recognition system to determine the best possible matches of the word in said utterance to the words in said word list (col. 3, line 60 – col. 4, line 22, teaches "voice dialing...speaking either the name or a nickname...voice dialing record is maintained for each subscriber. Information relating to each party or individual who may be called...providing and updating the information...calling entry...nickname...telephone number"; col. 4, ll. 49-67, teaches "speech recognition model for each name and nickname...speech recognition models for names...generated from the text of the name"; col. 5, ll. 1-46, teaches "subscriber to provide one or more speech samples of a name...optionally speaker dependent...generated speech recognition model");

after determining said best possible matches, creating a grammar including a subset of said records in said database that contain at least one of said best possible matches (col. 3, line 60

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- col. 4, line 22, teaches "voice dialing...speaking either the name or a nickname...voice dialing record is maintained for each subscriber. Information relating to each party or individual who may be called...providing and updating the information...calling entry...name...telephone number"; col. 4, ll. 49-67, teaches "speech recognition model for each name and nickname...speech recognition models for names...generated from the text of the name"; col. 5, ll. 1-46, teaches "subscriber to provide one or more speech samples of a name...optionally speaker dependent...generated speech recognition model"; Figs. 13-14, the combined entity of the directory and the speech recognition models for each of the names implements a grammar since a collection of models serves as a speech recognition grammar, and the records/entries themselves are also part of the entity made of the models and the directory); and

using the automated speech recognition system to match said utterance to a record within said grammar (col. 6, ll. 17-45, teaches "recognizing a name...Dialing John Smith...'John Smith' is the recognized name"; col. 13, ll. 49-65, teaches "speech recognition circuits...used during voice dialing operations to detect names in a voice dialing directory").

Regarding claim 2, Pershan teaches wherein said database is a directory (see col. 13, ll. 49-65, "directory").

Regarding claim 3, Pershan teaches wherein said record is a listing (see col. 3, line 60 – col. 4, line 22, "calling entry"; and Figs. 13-14).

Regarding claim 4, Pershan teaches wherein the word list includes transformations of said selection of words (col. 21, ll. 37-55, "name 'JOHN DOE' and the nick-name 'JOHHNNY D'; col. 3, line 60 – col. 4, line 22, "name or nickname"; col. 21, ll. 1-17, "third column lists the nickname," the nickname is a transformation of the name; Figs. 13-14).

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Regarding claim 5, Pershan teaches wherein the utterance is obtained by asking questions of a user (col. 26, ll. 46-50, teaches "requests the name to be dialed"; col. 27, line 54 – col. 28, line 7, "would you like to place another call"; a request to place another call followed by a "Yes" eventually results in a name/utterance being entered by the user).

5. <u>Claim 9</u> is rejected under 35 U.S.C. 102(a) as being anticipated by <u>Woods et al.</u> ("Woods"), US Patent 6,510,417.

Woods teaches a method of providing directory assistance to a user comprising: receiving an utterance from a user, said utterance requesting a business listing and using a voice recognition system to determine said business listing in response to said utterance, (col. 6, ll. 39-58, teaches "voice portal...automatic speech recognition...accepting user input whenever possible"; col. 2, ll. 16-37, "voice access...database...information regarding users"; col. 27, ll. 1-35, "voice portal...speech recognition"; col. 27, ll. 55-65, "user first specifies the domain of interest...e-commerce [which includes businesses]...vendor information"; col. 6, line 4-5, "Service 56 is any type of company, content or service provider with a connection to network"); and

providing an advertisement to said user before providing said business listing to said user (col. 7, ll. 19-63, teaches "advertisements to be presented to the user during a communication session"; col. 32, ll. 18-29, "advertisement may be delivered when the user is preparing to enter the system to begin a new session," if the advertisement is delivered as the user enters the system then the user has not received the information/listing yet); wherein said user is not charged an additional fee for the directory assistance (col. 2, ll. 1-14, "free access," "free of charge").

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## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. <u>Claim 7</u> is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Pershan et al.</u> in view of <u>Lennig et al.</u> ("Lennig"), US Patent 5,479,488, and further in view of <u>Stanley et al.</u>

Pershan teaches a method of providing a listing to a user comprising: establishing communications with the user (col. 3, line 60 – col. 4, line 22 teaches "voice dialing...speaking either the name or a nickname...voice dialing record is maintained for each subscriber.

Information relating to each party or individual who may be called...providing and updating the information...calling entry...nickname...telephone number"; col. 4, ll. 49-67, teaches "speech recognition model for each name and nickname...speech recognition models for names...generated from the text of the name"; and col. 5, ll. 1-46 teaches "subscriber to provide one or more speech samples of a name...optionally speaker dependent...generated speech recognition model"); and

asking a plurality of questions of said user, and obtaining and recording answers therefor (col. 26, ll. 46-50, teaches "requests the name to be dialed"; col. 27, line 54 – col. 28, line 7, "would you like to place another call"; a request to place another call followed by a "Yes" eventually results in a name/utterance being entered by the user).

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Pershan fails to teach, but Lennig teaches: by using said plurality of answers, determining a listing using an automated speech recognition system; using an operator to provide said listing if it is determined said automated speech recognition system cannot determine the listing; and if said automated speech recognition system can determine said listing, having said automated speech recognition system do so (col. 7, ll. 25-47, "cannot be recognized...hands off to a human operator...If the unit recognizes...main number...uses speech recognition...").

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching elements of Pershan with Lennig in order to provide an alternative method to clarify the caller's request when the recognizer cannot understand the user, as described by Lennig (col. 7, 11. 25-29).

Pershan and Lennig do not explicitly teach establishing a confidence level for said listing; providing said listing, said plurality of questions, and said recorded answers to an operator if said confidence level is below a predetermined threshold; and if said confidence level is above a predetermined threshold, providing said listing to said user. However, using a confidence value with a threshold for acceptance is well known in the art as evidenced by Stanley, which teaches in col. 2, ll. 21-44, "system incorporates a core recognition program which compares an input utterance with...and generates scores for each of at least a portion of the models...threshold parameter for scores."

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching elements of Pershan and Lennig with Stanley because Stanley teaches an advantage of using a confidence threshold is that it can be adjusted to the user's liking (Abstract).

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8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stanley et al. ("Stanley"), US Patent 5,684,924.

Stanley teaches a method of automatic speech recognition comprising: receiving an utterance (col. 3, Il. 17-19, receiving input from microphone);

recording said utterance and using said a voice recognition system to recognize said recorded utterance (col. 2, summary, "a core recognition program...compares an input utterance with a multiplicity of trained word models and generates scores for each of at least a portion of the models," records and attempts to recognize utterance); and

if the recognition of said recorded utterance is below a pre-set confidence level determined by said voice recognition system (col. 2, summary, scores are determined by the recognition system and threshold parameter for scores are adjustable by the user; however, based on the threshold parameter for scores adjusted by the user, the system can thereby make confidence level determinations), adjusting the gain of said recorded utterance and rerecognizing said recorded utterance using said voice recognition system (col. 2, summary, "includes a plurality of primary utility program modules which respond to user input to change system parameters, e.g. the gain, sensitivity and threshold parameter"; col. 7, ll. 24-31, "the system is DEAF...gain is then adjusted"; and col. 7, ll. 44-52, "new setting levels are stored with the recognition program itself and employed in all future recognition [including rerecognized utterances]...operation of the overall system will increasingly adapt to the characteristics of a particular performance and higher accuracy of recognition on an ongoing basis").

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It would have been obvious for one of ordinary skill in the art at the time the invention was made to re-recognize said recorded utterance using said voice recognition system so that the new setting levels may be tested for improvement.

#### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eunice Ng whose telephone number is 571-272-2854. The examiner can normally be reached on Monday through Friday, 8:30 a.m. - 5:00 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EN 12/11/07

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